

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A printed circuit board comprising:

a printed wiring board;

a at least one component mounted on the printed wiring board, wherein the printed circuit board has a volume of space bounded by at least one of a body of the component, a lead of the component, and said printed wiring board, wherein said volume of space has at least one opening ~~with one or more openings~~ on the surface of the printed circuit board; and

an electrically non-conductive filler material disposed ~~in the space and~~ on the surface of the printed circuit board so as to bridge across the at least one opening ~~or more openings~~ of the volume of space ~~and at least partially infill the space, wherein the filler material renders to render~~ the volume of space substantially inaccessible to subsequently-applied coatings.

2. (Canceled)

3. (Currently Amended) The printed circuit board of claim 1, wherein the volume of space is bounded by leads of said component, a body of said component, and said printed wiring board, wherein at least one of the ~~at least one of the one or more openings~~ opening on the surface of the printed circuit board ~~are~~ is located between neighboring component leads.

4. (Currently Amended) The printed circuit board of claim 1, wherein the ~~at least one component comprises~~ is one of a plurality of components, and wherein the volume of space is bounded by at least neighboring ~~two or more of the plurality of components~~.

5. (Currently Amended) The printed circuit board of claim 1, wherein the volume of space is bounded by the component and the printed wiring board.

6. (Original) The printed circuit board of claim 1, wherein said filler material is thixotropic.

7. (Original) The printed circuit board of claim 1, wherein said filler material is an epoxy.

8. (Currently Amended) The printed circuit board of claim 7, wherein said epoxy is one of the family of Bisphenol-A epoxies mixed with an amine hardener ~~hardner~~.

9. (Original) The printed circuit board of claim 7, wherein said epoxy is a thermally cured epoxy.

10. (Original) The printed circuit board of claim 7, wherein said epoxy is a latex based non-electrically conductive epoxy.

11. (Currently Amended) The printed circuit board of claim 1, wherein the subsequently-applied coating comprises:

a layer of dielectric coating that conformingly coats exposed surfaces of the printed wiring board, the component, and the filler material, wherein the at least one opening ~~openings of the volume of space is space are~~ sufficiently large to prevent the dielectric coating from bridging across the at least one opening ~~one or more openings~~ without the presence of the filler material.

12. (Currently Amended) A printed circuit board comprising:

a printed wiring board;

a plurality of components each ~~having a component body~~ mounted on said printed wiring board, wherein the printed circuit ~~wiring~~ board has at least one volume of space bounded by at least one of a component leads, the lead, a component body, adjacent the component leads, and ~~a portion of the printed wiring board, below the component, leads,~~ wherein each at least one volume of space comprises at least one opening on the surface of the printed circuit board; and

a layer of non-electrically-conductive filler material adhered to printed circuit board surfaces to provide a contoured, contiguous filler material surface, surface having gradual transitions, wherein the filler material at least partially infills the at least one volume of space through the at least one opening, and further wherein the filler material bridges across the at least one opening so as to encapsulate and seal the at least one volume of space.

13. (Original) The printed circuit board of claim 12, wherein said filler material is thixotropic.

14. (Previously Presented) The printed circuit board of claim 12, wherein said filler material is an epoxy.

15. (Currently Amended) The printed circuit board of claim 14, further comprising:

a low viscosity, high adherence dielectric coating that, when applied and cured, covers portions of said printed circuit board coated with the filler material, wherein the filler material prevents the dielectric coating from entering the at least one opening of the at least one volume of space.

16. (Currently Amended) The printed circuit board of claim 15, further comprising:

a conductive coating covering at least a portion of said dielectric coating, coating ~~and portions of the printed circuit board not covered by the dielectric coating,~~ wherein the dielectric coating and the conductive coating form a conformal electromagnetic interface (EMI) ~~EMI~~ shield that adheres to and conforms with the printed circuit board surfaces.

17. (Original) The printed circuit board of claim 14, wherein said filler material is thixotropic.

18-21 (Canceled)